2015 ANNUAL WATER QUALITY REPORT

SPRINGTREE SERVICE AREA

Español: Este informe contiene información importante acerca de su agua potable. Por favor llame al (954) 888-6000 para adquirir una traducción o solicitar ayuda para entender el contenido.

CITY OF SUNRISE FLORIDA

We are pleased to present to you this year's Annual Drinking Water Quality Report. This report is designed to inform you about the quality water services we deliver every day. Our constant goal is to provide a safe and reliable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment processes and protect your water sources. We are committed to ensuring the quality of your water.

This Consumer Confidence Report (CCR) has been prepared and is available in our website for our utility customers as required by the EPA 40 Code of Federal Regulations (CFR) Part 141 requirements. Our customers receive a statement and a direct URL link on their water bill informing where they can view and print a copy of their CCR report .

Where does my water come from?

The City of Sunrise Utilities Department's drinking water is drawn from the Biscayne aquifer through a series of wells. The aquifer is replenished by surface water recharge that percolates into the aquifer through many feet of soil, sand and rock that act as natural filters to remove impurities. The City's wells have a capacity to deliver 51.5 million gallons of water per day and the Utility serves approximately 215,000 people within Sunrise, Weston, Davie, and Southwest Ranches. The Utilities Department operates four well fields and three water treatment plants.

Treatment of your water includes lime softening, filtration, and disinfection. Also, a small portion of the water is treated with Reverse Osmosis membranes at the Springtree Water Treatment Plant. Treated water is stored to meet peak demand periods. Chlorine and ammonia are added for disinfection and fluoride is added for dental health purposes.

Our Water Future

For years, our customers have enjoyed abundant and high quality water. However, as water demand continues to increase statewide and as state agencies have imposed more stringent water regulatory compliance in Florida, we must maximize efficiency and carefully select our water sources and treatment processes. The Sunrise Utilities Department is working with other municipalities and state agencies to evaluate new and innovative water supply alternatives. From these efforts we are expanding our water supplies and improving reliability and quality today and for our future. The City is committed to continue advancing water conservation programs such as the Conservation Pays Broward Partnership Rebate Program, Broward's NatureScape Irrigation Program, the Leak Detection Program and community education and outreach to raise water conservation awareness. Our goals are many for developing and sustaining a reliable, high quality and affordable water for you, our customers, and we invite you all to join in our efforts to stretch every drop as we strive to bring you the best service at the most affordable price!

"The City of Sunrise Utilities Department treats one of the most important resources in the world: your water"

City of Sunrise

Understanding Water Contaminants

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radio-active material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

Microbial contaminants, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, or farming.

Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production. These can also come from gas stations, urban storm water runoff, and septic systems.

Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791

Lead in Tap Water

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of Sunrise is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been stagnant in your plumbing for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

Special Health Considerations

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk to infections. These people should seek advice about drinking water from their health care providers. EPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

In order to ensure that tap water is safe to drink, EPA prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

City of Sunrise

Source Water Assessment

In 2015 the Florida Department of Environmental Protection (DEP) performed a Source Water Assessment of our system. The assessment was conducted to provide information about any potential sources of contamination in the vicinity of our wells. Potential sources of contamination are those facilities, sites, and activities that have the potential to affect the underlying ground water aquifers or nearby surface waters used for public drinking water supply. Many of these potential sources are regulated by DEP and the location and status of these sites are maintained within DEP databases. By utilizing in-house databases and a geographical information system (GIS), DEP can access and illustrate the relationships of potential contaminant sources to the approximately 12,000 public water supply intakes in Florida. It should be noted that the potential sources of contamination identified by this assessment project are just that: potential sources. Many of these facilities are regulated and operate under stringent construction and maintenance requirements designed to protect both human health and the environment. The purpose of conducting the source water assessments is to provide information that will lead to actions to reduce current risks or avoid future problems. There are 5 potential sources of contamination identified ranging from low to moderate susceptibility level. The assessment results are available on the FDEP Source Water Assessment and Protection Program website at www.dep.state.fl.us/swapp or they can be obtained from Ted Petrides, Director of Plant Operations at (954) 888-6000.

Understanding Water Quality Data

What are Water Quality Standards?

Our drinking water standards, established by USEPA and the Florida Department of Environmental Protection (FDEP) set limits for substances that may affect consumer health or aesthetic qualities of drinking water. The chart in this report shows the following types of water quality standards:

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the Maximum Contaminant Level Goals (MCLG) as feasible using the best available treatment technology.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Primary Drinking Water Standard: MCLs for contaminants that affect health along with their monitoring and reporting.

Regulatory Action Level (AL): The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements that a water system must follow.

How are Contaminants Measured?

Water is sampled and tested throughout the year. Contaminants are measured in:

- **Parts per million (ppm) or milligrams per liter (mg/L):** one part by weight of the analyte to 1 million parts by weight of the water sample.
- **Parts per billion (ppb) or micrograms per liter (µg/L):** one part by weight of the analyte to 1 million parts by weight of the water sample.
- **Locational Running Annual Average (LRAA):** the average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

What is a Water Quality Goal?

In addition to mandatory water quality standards, USEPA and FDEP have set voluntary water quality goals for some contaminants. Water quality goals are often set at such low levels that they are not achievable in practice and are not directly measurable. Nevertheless, these goals provide useful guide posts and direction for water management practices. The chart in this report includes two types of water quality goals:

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

To determine how the quality of your drinking water compares to government standards, compare the "Level Detected" column with the maximum allowed "MCL" column.

2015 WATER QUALITY DATA

The City of Sunrise Utilities Department routinely monitors for contaminants in your drinking water according to Federal and State regulations. Except where indicated otherwise, this report is based on the results of our monitoring for the period of January 1 to December 31, 2015. Data obtained before January 1, 2015, and presented in this report are from the most recent testing done in accordance with the regulations.

Contaminant (Unit of Measurement)	Year Tested	MCL Violation Y/N	Level Detected / Range		MCLG	MCL	Likely Source of Contamination
Microbiological Contaminants							
Total Coliform Bacteria (Highest Monthly %)	April and Dec 2015	N	1.1%		0	>5.0%*	Naturally present in the environment
Radioactive Contaminants							
Uranium (ug/L)	May 2015	N	0.705		0	30	Erosion of natural deposits
Inorganic Contaminants							
Arsenic (ppb)	May 2015	N	0.96		0	10	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	May 2015	N	0.0034		2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm)	May 2015	N	0.62		4	4	Erosion of natural deposits; discharge from fertilizer and aluminum factories. Water additive which promotes strong teeth when at optimum level of 0.7
Nitrate (ppm)	May 2015	N	0.051		10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (ppm)	May 2015	N	0.028		1	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm)	May 2015	N	36.3		N/A	160	Salt water intrusion, leaching from soil
Stage I - Disinfectants and Disinfection By-Products							
Chloramines (ppm)	Jan - Dec. 2015	N	2.7 annual average (Range 0.7 to 3.8)		MRDLG = 4	MRDL= 4	Water additive used to control microbes
Stage II - Disinfectants and Disinfection By-Products							
Haloacetic Acids (five) (HAA5) (ppb)	Jan. - Dec. 2015	N	24.3 (Max LRAA) (Range 16.1 to 39.5)		N/A	60	By-product of drinking water disinfection
TTHM (Total trihalomethanes) (ppb)	Jan. - Dec. 2014	N	67.2 (Max LRAA) (Range 31.3 to 62.4)		N/A	80	By-product of drinking water disinfection
Lead and Copper (Tap Water)							
Copper (tap water) (ppm)	June-July 2014	AL Exceeded? N	90th Percentile Result = 0.0042	No. of sampling sites exceeding the AL = 0	1.3	Action Level (AL) = 1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	June-July 2014	AL Exceeded? N	90th Percentile Result = 1.0	No. of sampling sites exceeding the AL = 0	0	Action Level (AL) = 15	Corrosion of household plumbing systems; erosion of natural deposits

* For systems collecting at least 40 samples per month: presence of coliform bacterial in >5.0% of monthly samples.

City of Sunrise

Precautionary

Boil Water Notices

As part of ongoing efforts to protect the health of our communities, the state of Florida has developed rules that regulate how water utilities respond to water main breaks. According to the rules, if a water main breaks and its interior is exposed to groundwater, soil, or other foreign matter, a Precautionary Boil Water notice must be issued in the affected area. As the name implies, this is a precautionary measure, and more importantly, such a response is not necessary for most water leaks.

We understand that precautionary boil water notices can be a major inconvenience and we make every effort to avoid them. In the rare event that a significant break does occur, notices are distributed immediately through a high-speed telephone notification system (Code Red). A notice is lifted only after bacteriological testing confirms the water is safe to drink. We care about your safety and encourage you to follow the precautionary notice should one be issued in your area.

If you are listed in the telephone directory, you are automatically included on our call list. However, if you have moved within the last 12 months, or if you use a cell phone as your primary telephone, please take a moment to register your contact information with us online at www.sunrisefl.gov by clicking on the "Utilities" tab under the "Departments & Services" menu and then following the link for "Emergency Notification". If you do not have internet access and wish to register for Code Red call Ted Petrides at 954.888.6000.

Did You Know...

The City of Sunrise water Utilities Department maintains 5,087 fire hydrants throughout the water distribution system. Each year, the City flushes a portion of the hydrants to promote optimum operating conditions for the system. Periodic flushing of the water pipelines removes sediment and scale and maintains the cleanliness of the water system, assuring high quality water reliability.

Did you know that connecting a garden hose to a spigot without a vacuum breaker is a cross-connection? Please take care around your home or place of business so that together we can keep our water safe.

What is a Cross-connection?

A cross-connection is a connection or potential connection between any part of a potable water system and any other environment containing other substances in a manner that, under any circumstances could contribute to contamination of the potable water system. Other substances may be gases, liquids, or solids, such as chemicals, waste products, steam, water from other sources (potable or non-potable), or any matter that could otherwise contaminate the water system. Contaminants can enter the potable water system when the pressure of a cross-connected polluted source exceeds the pressure of the potable source. The Utilities Department has a cross-connection control program that eliminates cross-connections from the city's water distribution system and maintains ongoing backflow prevention efforts to systematically ensure the safety of your water.

City of Sunrise

WHAT DOES A 20% REDUCTION *in water use look like?*

AVERAGE DAILY USE

The average resident at City of Sunrise uses 105 gallons of water per day. Here are some easy ways to reduce water use. Find the right combination for you to reduce by 20% or 21 gallons a day.

INSTALL AERATORS ON BATHROOM FAUCETS

saves

1.2 GALLONS

per person/day

WASH ONLY FULL LOADS OF CLOTHES

saves

15-45 GALLONS

per load

TURN OFF WATER WHEN BRUSHING TEETH OR SHAVING

saves

10 GALLONS

per person/day

TAKE FIVE MINUTE SHOWERS INSTEAD OF 10 MINUTE SHOWERS

saves

12.5 GALLONS

with a water efficient showerhead

FIX LEAKY TOILETS

saves

30-50 GALLONS

per day/toilet

INSTALL EFFICIENT, WATERSENSE-LABELED SHOWER HEADS

look for WaterSense

saves

1.2 GALLONS

per minute

OR

10 GALLONS

per average 10-minute shower

INSTALL A HIGH-EFFICIENCY WATERSENSE-LABELED TOILET (1.28 GALLON PER FLUSH)

saves

19 GALLONS

per person/day

look for WaterSense

UTILITIES DEPARTMENT

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